SHORELINE Alternative MITIGATION PLAN





Overview



Lake Union / Ship Canal
Shoreline Alternative Mitigation Plan

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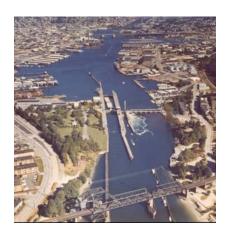
The Shoreline Alternative Mitigation Plan represents a commitment by the City of Seattle to support its maritime industry while simultaneously protecting the shoreline from further harm and, when possible, promoting shoreline restoration in the Ship Canal and Lake Union.

Through this plan, eligible applicants for shoreline development permits will have the option to either mitigate shoreline impacts at the proposed development site, or contribute to a fund for shoreline restoration mitigation elsewhere within the planning area. In addition, all applicants will benefit from a new standardized approach to measuring shoreline impacts that increases transparency and predictability in the project review process.

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WHAT IS SHORELINE MITIGATION?

When a shoreline development project is proposed, the City reviews the projects' potential to cause harm to the shoreline environment. Once the City identifies the potential level of shoreline impact, it requires applicants to "mitigate," or offset, these impacts as a condition of approval for the shoreline project.

The mitigation process can impose hardships on small and medium-sized maritime businesses that require access to the shoreline. Because the supply of shoreline properties available for maritime use is limited, a project site can be further constrained if a portion of it is set aside to accommodate mitigation requirements. For some projects, the process for identifying impacts and appropriate mitigation measures can be costly, time consuming, and unpredictable.

The City's current onsite mitigation approach is intended to maintain existing levels of shoreline ecological function. The new proposal to allow offsite mitigation introduces the possibility of combining mitigation efforts to develop larger and more effective shoreline mitigation located in strategic locations throughout the planning area. In addition, it will be easier for the City to monitor the long-term maintenance of restoration projects and to help ensure longer-lasting shoreline benefits.

Shoreline Development & Project Mitigation







How does the shoreline development process work now?

The City reviews all shoreline projects to identify potential impacts to the shoreline environment and then follows three steps to address those impacts:

STEP 1: APPLY DEVELOPMENT REGULATIONS

Shoreline development regulations are tailored to each shoreline environment to advance land use goals and protect the shoreline environment. These regulations address such concerns as building height, setback from the shoreline and, for certain uses, public access requirements.

STEP 2: IDENTIFY DESIGN ALTERNATIVES

After conformance with development regulations is ensured, the City works with the developer to identify design alternatives that could minimize adverse shoreline impacts. For example, the impact of a dock can be reduced by adding open grating to the deck so that light can shine through and improve the habitat for salmon under the dock.

STEP 3: MITIGATE

Any adverse shoreline impacts that remain after taking the first two steps must be mitigated. These mitigation measures are required conditions of the project's permit.

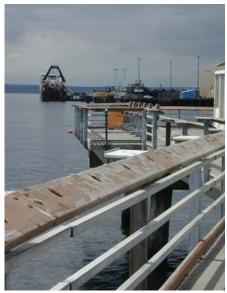
PUBLIC REVIEW

The public has an opportunity to review permit decisions the City makes on shoreline development proposals. Each permit decision includes a description of the project, discusses likely shoreline impacts, and identifies appropriate mitigation.

The Shoreline Alternative Mitigation Plan includes the following components:

- 1. New procedures for measuring shoreline project impacts and associated mitigation measures.
- 2. Procedures for offsite mitigation, when appropriate.
- 3. Criteria for selection of shoreline restoration projects that form the basis for offsite mitigation.
- 4. A description of key components for offsite shoreline restoration projects.
- A listing of potential shoreline restoration projects throughout the Lake Washington/Lake Union ship canal system.





How the Shoreline Alternative Mitigation Plan Changes this process.

The Shoreline Alternative Mitigation Plan would give project applicants the option of funding offsite shoreline restoration to mitigate their projects' impacts. The City would use a new systematic approach to measure a development project's impacts on the shoreline's ecological function. The City would follow the same approach to measure the improvement in ecological function that offsite restoration would produce. All other features of the shoreline project review process, including appeal procedures, would remain the same.

WHAT TYPES OF IMPACTS ARE ELIGIBLE FOR OFFSITE MITIGATION?

This plan limits eligibility for offsite mitigation to water-dependent and water-related land uses. Furthermore, not all required mitigation can be satisfied offsite. Mitigation measures for shoreline projects fall into two primary categories: mitigation for long-term impacts

and mitigation for construction or short-term impacts.

Long-term impacts relate to actions that have long-term adverse impact to the shoreline environment. Examples include adding new overwater coverage, building new bulkheads, or removing native vegetation from the shoreline. Examples of mitigation measures for these impacts include removal of unused overwater structures, revegetation of the shoreline, and removal of submerged debris. Mitigation for long-term impacts is the focus of the Shoreline Alternative Mitigation Plan.

Short-term and other construction related impacts are not eligible for offsite mitigation.

Measuring Shoreline Ecological Function







How Will We Measure Shoreline Ecological Function?

NO NET LOSS OF ECOLOGICAL FUNCTION

Ensuring no net loss of ecological function means that the health of the shoreline environment is no worse after project construction than before construction.

The Shoreline Alternative Mitigation Plan includes a system that measures and tracks changes in shoreline ecological function. This system represents a new way for the City to consistently measure negative and positive changes to the shoreline environment that result both from project impacts and from mitigation. This approach will be used regardless of whether project mitigation is onsite or offsite.

HABITAT EVALUATION PROCEDURES

The method the City will use to measure and track changes in ecological function is based on similar methods used by federal and state agencies, known as Habitat Evaluation Procedures. When reviewing project applications, the City will measure shoreline ecological function in 'habitat units' that are based on key factors that affect the health of the shoreline environment.

This plan views shoreline ecology through the lens of habitat requirements for Chinook salmon because:

- Aquatic habitat in the Shoreline
 Alternative Mitigation Plan area
 provides the only migratory route to the
 Salmon Bay estuary and Puget Sound
 for Cedar River and Lake Sammamish
 populations of salmonids.
- The majority of project impacts and mitigation requirements directly relate to Chinook salmon habitat needs.
- Many of the same shoreline conditions that support Chinook salmon habitat also support habitat for other aquatic species and terrestrial shoreline species.

Figure One — This diagram shows how shoreline features and conditions contribute to the shoreline's ecological function.

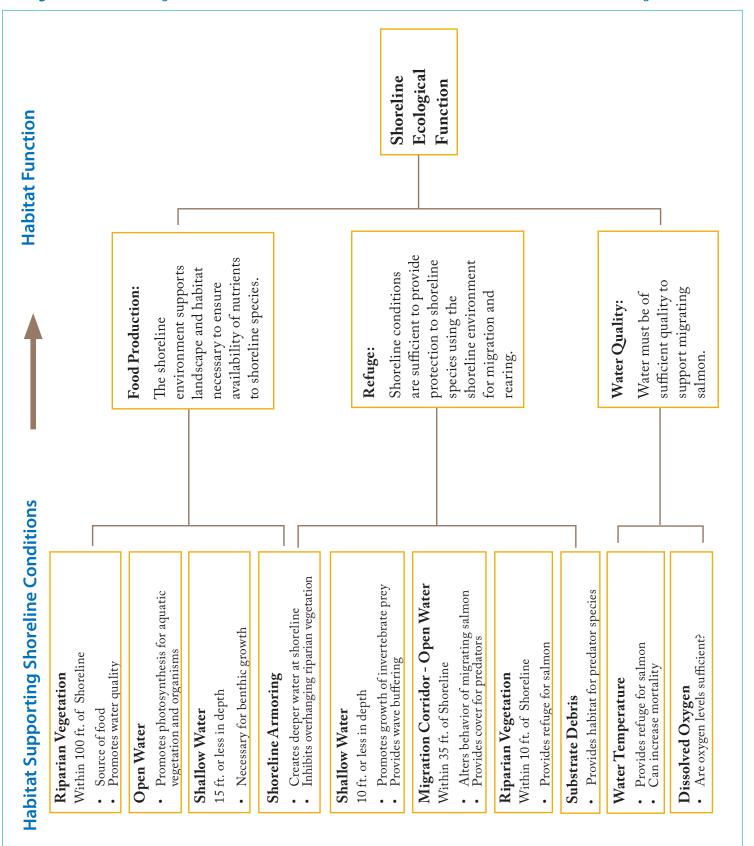
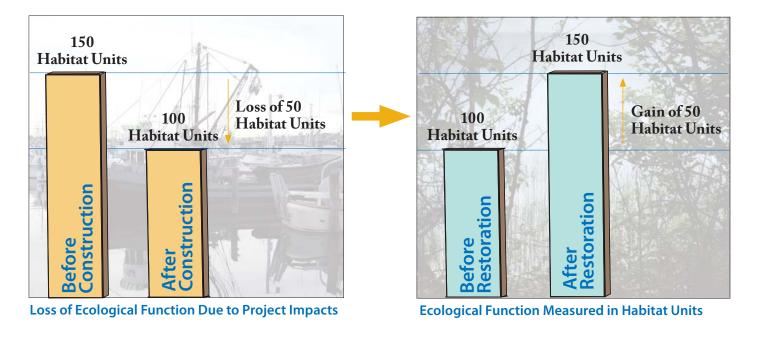


Figure Two



Measuring Ecological Function & Project Mitigation

By assigning a numeric value to a project's impact on the shoreline habitat and using the same method to assign a value to the benefits of a restoration project, it is possible to ensure that the amount of restoration equals the amount of impact, even if the mitigation is not on the same site where the impact occurs.

Figure 2 shows a change in shoreline ecological function for two different sites. The first illustration shows a loss in ecological function due to a shoreline development project. In this case, there is a loss of 50 habitat units. The second illustration shows a net gain of 50 habitat units due to shoreline restoration. In this example, the net gain in new habitat units offsets the loss of habitat units due to shoreline development.

Shoreline Restoration





Where Will Offsite Mitigation Occur?

Offsite mitigation will occur at shoreline restoration projects within the study area. The city will identify and manage these projects to achieve the standard of no net loss of ecological function and to provide ongoing support for these projects. The plan sets out criteria that will guide project selection.

Criteria that guide selection of offsite shoreline restoration projects consider factors such as land use policy, project feasibility and scientific information about habitat use within the Shoreline Alternative Mitigation Plan boundaries.

SHORELINE ANALYSIS AND PROJECT SELECTION

This plan does not identify specific projects that will be implemented through offsite mitigation. Legal requirements regarding use and timing of mitigation fees as well as variability in the number of projects in any given year, make precise determination of offsite projects difficult.

Project Selection Criteria:

- Avoid conflicts with water-dependent uses.
- 2. Provide a mix of restoration activities at every restoration site.
- 3. Provide sufficient gains in ecological function to offset losses.
- 4. Avoid creation of predator habitat.
- 5. Use a mixture of publicly-held and privately-held property for restoration projects. Avoid using public property when other resources are available within a five-year horizon. Focus on street ends.
- Pursue projects that leverage other resources to achieve a net increase in ecological function.





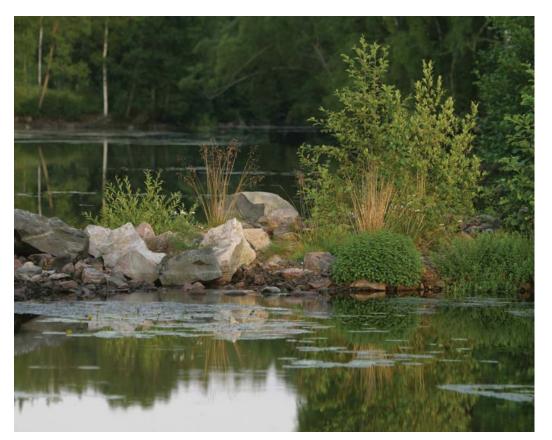


How Will We Know if Offsite Mitigation Works?

All offsite mitigation will include the following elements essential to producing long-term increases in shoreline ecological function.

- 1. Benchmarks. Shoreline restoration actions do not reach full ecological function immediately and, depending on the type of restoration activity, can take years to reach full function. In designing a program of restoration actions for each mitigation site, the city will establish benchmarks for the number of new habitat units that restoration will create and the timeline for producing the new habitat units.
- 2. Contingency Plan. All plans for shoreline restoration will include a contingency plan that identifies potential for restoration activities to fail. For example, restoration that includes

- revegetation of the shoreline with native species will require ongoing monitoring to prevent the return of invasive species or the failure of new plantings.
- 3. Site Control. When mitigation is provided onsite, applicants are required to maintain that mitigation for the life of the project. Similarly, offsite mitigation must be maintained on a long-term basis. This means restoration plans must consider how the City will control restoration sites either by owning them or obtaining conservation easements on them.
- 4. Maintenance and Evaluation. The City will have responsibility for ensuring long-term maintenance and evaluation. The design of each restoration action will include a maintenance and evaluation plan.





How Will We Finance Offsite Mitigation?

Applicants for shoreline development projects choosing to mitigate their shoreline impacts offsite will fund all or a portion of a restoration project to satisfy their mitigation requirements. The precise amount of mitigation funding required will be a product of the cost of producing a new habitat unit and the number of habitat units that are required for mitigation. For example, if the average habitat unit costs \$1,000 to produce, an applicant required to provide 50 habitat units worth of mitigation, would then pay \$50,000 toward the cost of offsite shoreline restoration. The financing of any one shoreline restoration action may include offsite mitigation contributions from multiple development projects and, potentially, public funding.



For more information on the Shoreline Alternative Mitigation Plan visit the website at www.seattle.gov/dpd/planning/samp or contact Jim Holmes, DPD Planner, at (206)684-8372 or jim.holmes@seattle.gov.